

INTRODUCTION

WHY SHOULD I READ THIS GUIDANCE?

If you handle, manufacture, use, or store any of the toxic and flammable substances listed in 40 CFR 68.130 (see Appendix A of this document) above the specified threshold quantities in a process, you are required to develop and implement a risk management program under a rule issued by the U.S. Environmental Protection Agency (EPA). This rule, “Chemical Accident Prevention Provisions” (part 68 of Title 40 of the Code of Federal Regulations (CFR)), applies to a wide variety of facilities that handle, manufacture, store, or use toxic substances, including chlorine and ammonia and highly flammable substances such as propane. This document provides guidance on how to determine if you are subject to part 68 and how to comply with part 68. If you are subject to part 68, you must be in compliance no later than June 21, 1999, or the date on which you first have more than a threshold quantity of a regulated substance in a process, whichever is later.

This model risk management program is intended for wastewater treatment plants (WWTPs), including publicly owned treatment works (POTWs) and other industrial treatment systems. It provides guidance on how to comply with part 68 with respect to chlorine, ammonia (anhydrous and aqueous), sulfur dioxide, and digester gas, the substances WWTPs usually use for treatment or produce as a result of treatment. We expect that any regulated substances present in your wastestreams will be in concentrations too low to require compliance.

The goal of part 68 — the risk management program — is to prevent accidental releases of substances that can cause serious harm to the public and the environment from short-term exposures and to mitigate the severity of releases that do occur. The 1990 Amendments to the Clean Air Act (CAA) require EPA to issue a rule specifying the type of actions to be taken by facilities (referred to in the statute as stationary sources) to prevent accidental releases of such hazardous chemicals into the atmosphere and reduce their potential impact on the public and the environment. Part 68 is that rule.

In general, part 68 requires that:

- g** Covered facilities must develop and implement a risk management program and maintain documentation of the program at the site. The risk management program will include an analysis of the potential offsite consequences of an accidental release, a five-year accident history, a release prevention program, and an emergency response program.
- g** Covered facilities also must develop and submit a risk management plan (RMP), which includes registration information, to EPA no later than June 21, 1999, or the date on which the facility first has more than a threshold quantity in a process, whichever is later. The RMP provides a summary of the risk management program. The RMP will be available to federal, state, and local government agencies and the public.

- g Covered facilities also must continue to implement the risk management program and update their RMPs periodically or when processes change, as required by the rule.

The phrase "risk management program" refers to all of the requirements of part 68, which must be implemented on an on-going basis. The phrase "risk management plan (RMP)" refers to the document summarizing the risk management program that you must submit to EPA.

HOW DO I USE THIS DOCUMENT?

This is a technical guidance document designed for owners and operators of WWTPs covered by part 68. It will help you to:

- g Determine if you are covered by the rule;
- g Determine what level of requirements is applicable to your covered process(es);
- g Understand which specific risk management program activities must be conducted;
- g Select a strategy for implementing a risk management program, based on your current state of compliance with other government rules and industry standards and the potential offsite impact of releases from your process(es); and
- g Understand the reporting, documentation, and risk communication components of the rule.

This document provides guidance and reference materials to help you comply with EPA's risk management program regulations. You should view and retain this guidance as a reference document for use when you are unsure about what a requirement means. This document does not provide guidance on any other rule or part of the CAA. Even if you are not covered by this rule, you should be aware that under the General Duty Clause of CAA section 112(r)(1), you are required to design and maintain a safe facility.

WHAT DO I DO FIRST?

Before developing a risk management program, you should do five things:

- (1) **Determine which, if any, of your processes are covered by this program**

Only WWTPs having one or more processes with a threshold quantity of a regulated substance (see 40 CFR 68.130 in Appendix A) in a "process" need to comply with part 68. "Process" is defined by the rule in § 68.3 and does not necessarily correspond with an engineering concept of process. The

STATE PROGRAMS

This guidance applies to 40 CFR part 68. You should check with your state government to determine if the state has its own accidental release prevention rules or has obtained delegation from EPA to implement and enforce part 68 in your state. State rules may be more stringent than EPA's rules. They may cover more substances or cover the same substances at lower thresholds. They may also impose additional requirements. For example, California's state program requires a seismic study. See Chapter 10 for information on state implementation of part 68. Unless your state has been granted delegation, you must comply with part 68 as described in this document even if your state has different rules under state law.

requirements apply only to covered processes. See Chapter 1 for more information on how to define your processes and determine if they are subject to the rule.

(2) Determine the appropriate program level for each covered process

Depending on the specific characteristics of a covered process, the results of the offsite consequence analysis for that process, and whether your state implements OSHA programs, it may be subject to one of three different sets of requirements (called program levels). See Chapter 2 for more information.

(3) Determine EPA's requirements for the facility and each covered process

Certain requirements apply to the facility as a whole, while others are process-specific. See Chapter 2 for more information.

(4) Assess your operations to identify current risk management activities

Because you probably conduct some risk management activities already (e.g., employee training, equipment maintenance, and emergency planning), you should review your current operations to determine the extent to which they meet the provisions of this rule. EPA does not expect you to redo these activities if they already meet the rule's requirements. See Chapters 5 to 8 individually for guidance on how to tell if your existing practices can meet those required by EPA.

(5) Review the regulations and this guidance to develop a strategy for conducting the additional actions you need to take for each covered process. Discuss the requirements with management and staff.

The risk management program takes an integrated approach to assessing and managing risks and will involve most of the operations of covered processes. Early involvement of both management and staff will help develop an effective program.

REQUIREMENTS ARE PERFORMANCE BASED

Finally, keep in mind that many of these requirements are performance-based; for example, part 68 does not specify how often you must inspect storage tanks, only that you do so in a manner that minimizes the risk of a release. This allows you to tailor your program to fit the particular conditions at your facility. The degree of complexity required in a risk management program will depend on the complexity of the facility. To illustrate, the operating procedures for a WWTP that does only primary treatment are likely to be less complex than those of WWTP that does secondary or tertiary treatment. Similarly, the length of training necessary to educate employees on such procedures will be proportional to the complexity of your operating procedures. And while a large WWTP with multiple processes may benefit from a computerized maintenance tracking system, a small WWTP with a simpler process may be able to track maintenance activities using a logbook.

There is no one "right" way to develop and implement a risk management program. Even for the same rule elements, your program will be different from everyone else's program (even those in the same industry) because it will be designed for your specific situation and hazards — it will reflect whether your facility is near the public and sensitive environmental areas, the specific equipment you have installed, the managerial decisions that you have made previously, and other relevant factors.

WHERE DO I GO FOR MORE INFORMATION?

EPA's risk management program requirements may be found in Part 68 of Volume 40 of the Code of Federal Regulations. The relevant sections were published in the *Federal Register* on January 31, 1994 (59 FR 4478) and June 20, 1996 (61 FR 31667). EPA has amended the rules several times. A consolidated copy of these regulations, including amendments through June 30, 1999, is available in Appendix A. On March 13, 2000, EPA finalized regulations to implement new rules excluding flammable substances when used as fuels or held for sale as fuel by retailers (65 FR 13,243); a copy of this final rule is also available in Appendix A.

EPA has worked with industry and local, state, and federal government agencies to assist sources in complying with these requirements. For more information, refer to Appendix C (Technical Assistance). Your local emergency planning committee (LEPC) also can be a valuable resource and can help you discuss issues with the public.

Finally, if you have access to the Internet, EPA has made copies of the rules, fact sheets, and other related materials available at the home page of EPA's Chemical Emergency Preparedness and Prevention Office (<http://www.epa.gov/ceppo/>). Please check the site regularly as additional materials are posted.

PART 68 REGULATORY TERMS

A few words and phrases have very specific meanings within the regulation. Some of these are unusual, which is to say they are not used in everyday language. Others are defined by the rule in ways that vary to some degree from their everyday meaning. The following are the major regulatory terms used in this document and a brief introduction to their meaning within the context of part 68. They are defined in § 68.3 of the rule.

“Stationary source” basically means facility. The CAA and, thus Part 68 use the term “stationary source” and we explain it in Chapter 1. Generally, we use “facility” in its place in this document.

“Process” is given a broad meaning in this rule and document. Most people think of a process as the mixing or reacting of chemicals. Its meaning under this rule is much broader. It basically means any equipment, including storage vessels, and activities, such as loading, that involve a regulated substance and could lead to an accidental release. Chapter 1 discusses the definition of process under this rule in detail.

“Regulated substance” means one of the 140 chemicals listed in part 68.

“Threshold quantity” means the quantity, in pounds, of a regulated substance which, if exceeded, triggers coverage by this rule. Each regulated substance has its own threshold quantity. If you have more than a threshold quantity of a regulated substance in a process, you must comply with the rule. Chapter 1 explains how to determine whether you have a threshold quantity.

“Vessel” means any container, from a single drum or pipe to a large storage tank or sphere.

“Public receptor” generally means any place where people live, work, or gather, with the exception of roads. Buildings, such as houses, shops, office buildings, industrial facilities, the areas surrounding buildings where people are likely to be present, such as yards and parking lots, and recreational areas, such as parks, sports arenas, rivers, lakes, beaches, are considered public receptors. Chapter 2 discusses public receptors.

“Environmental receptor” means a limited number of natural areas that are officially designated by the state or federal government. Chapter 2 discusses this definition.

WHAT IS A LOCAL EMERGENCY PLANNING COMMITTEE?

Local emergency planning committees (LEPCs) were formed under the federal Emergency Planning and Community Right-to-Know Act (EPCRA) in 1986. The committees are designed to serve as a community forum for issues relating to preparedness for emergencies involving hazardous substances. They consist of representatives from local government, local industry, transportation groups, health and medical organizations, community groups, and the media. LEPCs:

- g** Collect information from facilities on hazardous substances that pose a risk to the community;
- g** Develop a contingency plan for the community based on this information; and
- g** Make information on hazardous substances available to the general public.

Contact the mayor's office or the county emergency management office for more information on your LEPC.